The northern races of *Icterus pustulatus* (Icteridae), Scarlet-headed or Streaked-backed Oriole

by Allan R. Phillips

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The *pustulatus* group of American orioles was long recognized as comprising three species (Ridgway 1902): the Central American *I. sclateri*, with broad black centres to the back feathers; the more narrowly streaked *I. pustulatus* (supposedly) of the Mexican mainland; and the big-billed, orange-yellow backed *I. graysonii* of the Tres Marías Islands off western Mexico. All are chiefly from the Pacific slope.

In 1927 van Rossem expressed his "strong impression" that *sclateri* and *pustulatus* were conspecific, and they are now so considered generally. In adult *sclateri* he found individual variation the most important factor in the amount of black on the back; and the characters of *I. s. alticola* Miller and Griscom, 1925 he found unstable. But he attributed colour variation in El Salvador partly to migration; this is unlikely and is denied by Thurber *et al.* (1987).

Griscom (1930) nevertheless recognized as many as six named Central American forms, examining more than 80 skins. But though the statistics may sound impressive, surely few were unworn specimens of the same age/sex class; and his different series were not seasonally comparable, *fide* R. W. Dickerman. Hellmayr (1937) considered most of Griscom's and van Rossem's races to be based on individual variation and intergradation. Blake's (1968) supposedly authoritative synonymies simply omitted all races not recognized by Hellmayr.

I lack material to revise the Central American race(s). But on my first trip south of Sonora, in 1952, I was impressed by the differences between supposed *microstictus* of coastal Nayarit and Sonoran *microstictus*. So I gathered Mexican material of taxonomic value: unworn specimens with full data, carefully dissected.

Species limits

No biological or vocal differences are yet known in this group. The only hindrance to rating them as subspecies is their supposed geographic overlap in southern Mexico. Here Ridgway (1902) reported *sclateri* north to central Oaxaca (Ciudad Oaxaca) and even Cuicatlán, not far south of southeastern Puebla; while *pustulatus* ranged south and east to coastal Chiapas (Tonalá). But I find no such overlap in comparable material; and Binford (1989) considers all southwestern Oaxaca birds to be intergrades.

No English name appropriate for the entire species is apparent. Eisenmann (1955) proposed to change them all, with *I. sclateri* becoming "Streak-backed" Oriole. This was adopted for the entire species by A.O.U. (1983). But besides the fact that "Streak-backed" might seem to imply a single streak (as through the eye), *graysonii* is plain-backed. "Scarlet-headed Oriole", even when not exact, is at least mildly suggestive of some males of all races; but none could possibly imagine any *graysonii* as "Streak-backed". Thus "Scarlet-headed Oriole", already in use by A.O.U. (1957), is at least more appropriate than "Streak-backed Oriole" for the species; it does not directly contradict the pattern of any race. Why this strange passion to change established names and thus outdate and confuse the literature and archives (in the name of avoiding confusion! A.O.U. 1983: xxii)? See especially Griscom (1947), also Phillips (1986: xlix-lii).

Mexican subspecies

Variation in mainland Mexico is largely clinal. The least conspicuously streaked populations are in the northwest, the broadest black streaks in the southeast. This pattern is modified, however, by small size and bright colours along the central Pacific coast, as explained below.

Samples from various outlying and insular populations are too small for definite classification. Besides comparing specimens within correct age/sex classes, in useful plumage, we must beware the occasional unusual moult pattern. (Normally, the first basic plumage lasts a full year.) Present material permits formal recognition of only six races in México:

Icterus pustulatus microstictus Griscom 1934, *Bull. Mus. Comp. Zool.* 75: 408 (Guaymas, Sonora).

Diagnosis. The dullest race. Median streaks of interscapulars black only in ♂ adult, where narrower than in central and southern Mexican ♂♂. Dusky streaks least blackish (palest) in Sonoran ♀♀, which look uniformly greyish above in unworn plumage, due to broad tips of feathers from crown to upper tail-coverts; their tails are also less blackish than in other races. Immature ♂ also dullest, greyest. Tertials usually less black-and-white, showing somewhat less internal contrast. Middle wing-coverts white.

In Sonora, bill rather long and heavy; ♂ adult wing (chord), here and nearby, (94.2) 96.5–101.7 (105.2); tail, unless frayed, (87.9 [+?]) 89.2–96.7 (99). (Figures in parentheses represent single, apparently exceptional, specimens measured; plus signs indicate wear.)

Distribution. Resident (largely) from north-central Sonora south: coastally to southern Sinaloa, to at least 24°N (Elota) and probably the Mazatlán area; farther inland probably to Jalisco (and northern Michoacán?). Winters occasionally north to Tucson, Arizona (casually farther); possibly also southward (see below).

Notes. North of about 28°N in Sonora, many seem to leave in October and return in March (G. Monson). These may be more post-breeding than long-distance movements; the (recent) Tucson dates (31 July, specimen; 27 September to 22 March; Monson & Phillips 1981) correspond to its scarcity in northern Sonora. Note also the situation near Tepic, Nayarit (discussed below). Individual variation in colour is impressive, and I find no convincing evidence of long-distance migrations. I especially doubt the occurrence of

TABLE 1
Measurements of adult ♂ Mexican *Icterus pustulatus*

Area	*n*	Wing chord	*n*	Tail
Tres Marías Is. (mostly *ex* Ridgway)	6	102.9–106	6	90.2–94.3[+]
Sonora (and Tucson, Arizona)	6	94.2, 96.5–101.7, 105.2	5	87.9[+(?)], 89.2–96.7, 99
Coastal Nayarit (San Blas south to Las Varas)	4	90.5, 93.2–94.5	4	81.2[+(?)]–86.5
Nayarit (insular)	2	91, 94.7	2	80.3, 83.7[+??]
Southwestern Jalisco	1	92.5	1	79.8
Central to central-eastern Colima	10	(ca. 94–99.7)	10	80, 82–87.7
Volcán de Colima (north slope, migrant?)	1	(ca. 99–100)	1	91
East-central Guerrero (southeast of Chilpancingo)	21	93.5, 94.9–101.5	21	80, 83.4–89, 91.1
Coastal Guerrero (Acapulco)	11	90.5–95	11	77.7[+?], 80.3[+?]–82.8[+?]
Western Oaxaca (Putla)	2	97.8, 98.7	2	83.8[+(?)], 85.5[+(?)]
Central coastal Oaxaca (Puerto Angel)	1	96.4	1	81.3[+]
Coastal Oaxaca (west of Tehuantepec)	6	105.3–108.7	6	88.5–94.5
Southeasternmost Oaxaca (foothills of Sierra Madre de Chiapas)	4	maximum 103.7	4	maximum 88.7
Southeasternmost Oaxaca (south shore of Mar Muerto)	2	106.5, 107.5	2	90.8, 96
Central Chiapas (Tuxtla Gutiérrez) and southeast	7	103.5, 105–109.5	7	89, 90.3–94.3

Note. Plus signs indicate wear at the tips of the longest flight-feathers. Figures set off by commas are thought to be probably exceptional.

microstictus in Guerrero after March ("not breeding, November-May, O-d [=specimens in Museum of Vertebrate Zoology, University of California]"), claimed by Miller *et al.* (1957).

Field guide descriptions of all *I. pustulatus* as having "back and scapulars boldly striped with black", etc. (Blake 1953, Peterson & Chalif 1973) obviously do not describe most *microstictus*—nor any *graysonii*! The northern ♀ or immature is best portrayed in Edwards (1972).

Icterus pustulatus graysonii Cassin 1867, *Proc. Acad. Nat. Sci. Philadelphia* 19:48 (Tres Marías Islands, Mexico).

Diagnosis. Back orangeish yellow (♂) or light yellowish olive (♀ and immature, Ridgway), unstreaked or with a few fine black streaks.

Middle wing-coverts (♂) pale yellow to yellowish-white. Bill longest: exposed culmen ♂ 24.9–26.7, ♀ 22.9–24.9 (Ridgway 1902).

Distribution. Resident on Tres Marías Islands, off Nayarit.

Note. An occasional ♂ from the mainland coast (A. R. P. original no. 10,737, Singaita, near San Blas, 3 May 1973) has plain yellowish interscapulars, with hardly perceptible black streaking. But the middle wing-coverts are richer, and bill shorter, than *graysonii*.

Icterus pustulatus yaegeri subsp. nov.

Diagnosis. Smaller and brighter than *microstictus*. ♂ immature more yellowish olive (greener, less greyish or drab) on crown and back. ♀ also brighter above, and juvenile relatively bright above and below. Middle wing-coverts of ♂ adult usually (orangeish) yellow, and wing (chord) 90.5–94.7 (n=5), tail 80.3(+?)–86.5 mm; bill smaller than *microstictus*. Dark streaks of mid-back, in ♀ adult, not over 2.0 mm wide, usually decidedly less.

Distribution. Resident (presumably) in coastal lowlands from southernmost Sinaloa south to southern Nayarit. Inland it apparently approaches Tepic and the valley south of Compostela; but most specimens from the eastern, inland foot of the mountain just south of Tepic are dull like *microstictus* (see below), and the apparent approach may be seasonal dispersal.

Type. ♂ immature, A. R. P. original no. 4443, 8 km north of crossing of Río San Pedro at Peñitas, northwestern Nayarit, 16 December 1956. Length (extreme, in flesh) 211 mm; extent (wingspan) 302; wing (chord) 92; tail 79 [+; some wear]; streaks on mid-back 1.8 mm wide.

Etymology. To my compadre Lewis D. Yaeger, who introduced me to Nayarit and vicinity, collected much of the Nayarit material, and has aided me greatly in my work.

Notes. Adequate series (few of which exist) will probably adjust my distributions. In the absence of mountain, water, or forest barriers, we must expect intergradation and intermediate populations. Racial limits will not be sharp lines.

Many specimens in the considerable March series from the eastern foot of the mountain south of Tepic are practically indistinguishable from my few Sonora birds, but have somewhat smaller bills. They may represent short-distance dispersal, attracted to the ranch where Yaeger raised flowers—which evidently drew coast orioles also.

Icterus pustulatus dickermani subsp. nov.

Diagnosis. Like *yaegeri*, but still brighter in all plumages; the brightest known race with limited black above. Black streaks on mid-back *c*. 1.7–2.3 mm wide in adult ♀, whose crown is deep and bright, usually reddish-orange (sometimes orangeish-olive), and back deep (orangeish-tinged) olive—less olive- or greyish-washed than *yaegeri*. ♂ immature similarly less tinged, paler (clearer) yellow above. ♂ adult with streaks *c*. 1.4–2.8 mm wide, wing (chord) 90.5–95 (98.8), and tail (77.7[+?]) 80(+?)–83.5 (84.1) mm.

Distribution. Resident (presumably) in Pacific lowlands from southwesternmost Jalisco (intermediate?) and coastal Colima east to at least southern Guerrero, where north to the Tierra Colorada area.

Type. ♀ (adult?), Santos Farfán B. no. 27, Joluchuca, 17°21½'N 101°12½'W, southeast of Petatlán, southwestern Guerrero, 18 December 1968. Wing (chord) 91.5, tail 81.4, culmen from base 20.5; back streaks 1.5 mm wide. In my collection.

Etymology. To Dr. Robert W. Dickerman, expert ornithologist and steadfast friend, who for many years has aided greatly in my work, including our explorations in Guerrero.

Note. May extend, narrowly along the coast, into Oaxaca. A ♂ adult from as far east as Puerto Angel (LSU) has wing 96.4, tail 81.3 [+], but is broadly streaked like *pustulatus*. Farther west, specimens from Putla (Muséum National d'Histoire Naturelle, Paris) also appear intermediate.

Icterus pustulatus interior subsp. nov.

Diagnosis. Intermediate between *microstictus* and true *pustulatus* *(infra)*. Moderately bright; ♀ and immature duller above than *yaegeri* or *dickermani*, but brighter than *microstictus*. ♂ adult with scapulars greyish-edged externally and back streaks usually *c.* 1.7–2.5 mm wide, as in preceding races, but wing usually 95–101.5, tail 83.4–91 mm.

Distribution. Resident (presumably) in southern and central Mexico away from the coast; from central Colima (intermediates?) and southern Michoacán (Río Balsas valley north of coastal mountains) east probably to western Oaxaca, and north at least to Morelos.

Type. ♀ adult, A. R. P. original no. 10,650, Cañón de Lobos 20 km east of Cuernavaca, Morelos, 4 November 1972; prepared by Santos Farfán B. Wing 92.5, tail 86.7, back streaks *c.* 1.5 mm wide. Weight 34.8 g, little fat.

Etymology. The name refers to the fact that it is found only away from the coastal low-lands.

Notes. This is most of *I. p. pustulatus* auct. nec Wagler (see below). From its range I exclude Veracruz and the state of México, where occurrence is unconfirmed; also provisionally most northern populations: southernmost Zacatecas, Puebla and vicinity, and especially Cuicatlán, Oaxaca. Available material does not warrant naming these now. (Coastal Jalisco birds are also best left unnamed, not forced into either *yaegeri* or *dickermani*.)

Occurrence in the state of México rests on an "Atlisco, México" report; this presumably refers to Atlixco, Puebla, east of northern Morelos.

Icterus pustulatus pustulatus (Wagler) 1829, Isis von Oken 22, col. 727 (Mexico).

(?) *Icterus formosus* Lawrence 1872, *Annals Lyc. Nat. Hist. New York* X: 184 (Juchitán, southeastern Oaxaca).

Diagnosis. The most extensively black Mexican race. Scapulars of adults practically wholly black externally; black streaks in middle of back usually 3–4 mm wide in ♀ adult, *c.* 3–5 mm in ♂, whose middle wing-coverts are usually partly yellow or orangeish. Generally bright and large; bill large as in *microstictus* and wing, in most areas, long.

West of Tehuantepec, Oaxaca, where size seems about average, adults have wing (chord) 105.3–108.7 (7♂), 98–101.5 (3♀); tail 88.5–94.5 (7♂), (81.2) 86.5, 88.8 [+(?)] (3♀).

Distribution. Resident (presumably) from southeastern Oaxaca (west at least to 95°35′W=Tequisistlán area) east through Chiapas to (based on 1 dull ♀ imm.) adjacent Guatemala, if not far beyond. Birds like *pustulatus*, west to near the Valley of Oaxaca (southeast of Matatlán, LSU), apparently indicate populations intermediate toward *interior*.

Notes. Stresemann (1954) showed that the type or lectotype of *pustulatus* was taken by Deppe at "San Matteo" (=San Mateo del Mar), Oaxaca. Blake (1968) hesitated to transfer the name to what he called *formosus* because (1) Stresemann had not stated how or by whom the lectotype was selected, and (2) "because of the profusion of villages bearing the name San Mateo and the possibility that the provenance of the lectotype was not coastal". But if Wagler saw specimen(s) from other place(s), none is now known to exist. In case Stresemann's designation is not considered definite, I formally designate Berlin Museum 7556 as the lectotype of *Psarocolius pustulatus* Wagler, 1829.

The type is labelled "San Matteo, Nov. 1825, Deppe" and "Mas"; but it is evidently an adult female still in moult. The outer primaries are still sheathed (p9 is missing in one wing); p5 is longest but p6 subequal. The right wing (chord) measures 100 mm, the left more but apparently artificially; bones seem broken. Tail 91.5; black streaks on medial feathers 2.0 (on one 2.4), maximum on lateral feathers (at rear) 2.7 mm. The tail is black with extensive whitish corners; wing-markings white. The body, in 1966, was quite dull—much duller than cheeks; the upperparts were much overlaid with brownish. I saw no reason to question its coastal origin.

Not only is the type more narrowly streaked than is usual in southeastern Oaxaca, but the pale feather-edgings are naturally at their widest when freshly moulted. Thus it would appear rather narrowly streaked if examined without knowledge of annual cycles. Such examination may account for the supposed overlap of races in Oaxaca and Chiapas, where I find none.

As treated here, *pustulatus* is variable geographically. Birds from two points near the coast, in southeastern Oaxaca, are quite yellow, decidedly less orangeish than those from points not far north. The latter, locally at least, are also decidedly smaller: adult ♂♂ (MEXU, RTM) wing under 94, tail under 89 mm. Birds of surrounding populations are larger: central and central-eastern Chiapas; near to west of Tehuantepec, Oaxaca (but 1♂ adult to north measures 103.8, 84.8).

But a valid subspecies should be recognizable without referring to the labels in sedentary birds, in at least the great majority of taxonomically useful specimens; and it should occupy geographically contiguous areas. Probably very few if any Central American populations of *I. pustulatus* would satisfy these criteria if adequate useful material were available. In southeastern Mexico what at first seemed good subspecies now seem to show mosaic, rather than orderly or clinal, geographic distributions. But the large central Guatemalan race *alticola* Miller and Griscom may be recognizable (see however van Rossem 1927).

But though disorderly, geographic variation within *I. p. pustulatus* exists, as above. Monroe gives no details in claiming (1968) that "variation in color in populations south of Oaxaca seems to be entirely individual in nature" and that size variation in Honduras and Central America is great but not geographic nor altitudinal. His measurements ("wing: ♂, 103.1–117.9, mean 110.7; ♀, 101.9–115.5, mean 105.7") evidently reflect failure to consider the factors involved: age classes, wear, moult, and correct determination of sex and species. I find no such wide variation (*c*. 13%) in properly segregated specimens.

A contributing factor was evidently misidentification. In 1976 I found AMNH 748590 (♀, Comayagüela, Honduras) identified as *I. pustulatus flammulatus*; it was really *I. pectoralis*, as originally identified, with the throat still in juvenal plumage. (The feet, for one thing, were too heavy for *I. pustulatus*.) Monroe includes AMNH in his lists of specimens examined, but only 1 of his 78 *pectoralis* was imm. (a ♂) and none juvenile; whereas 4 imm. ♀♀ *pustulatus* were listed.

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Additional specimens were examined in the collections of the American Museum of Natural History (AMNH); Berlin Museum; Dickey Collection, University of California, Los Angeles; Louisiana State University Museum of Natural Sciences (LSU); Muséum National d'Histoire Naturelle, Paris; and (at the time) in the collection of W. J. Schaldach, Jr.

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The nest of the Grey-headed Flycatcher *Mionectes rufiventris*

by Glayson Ariel Bencke

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Although nests of most species presently assigned to the Neotropical genus *Mionectes* are already known, that of the Grey-headed Flycatcher *Mionectes rufiventris* of southeastern South America seems to be undescribed. The only reports on its nesting are from Argentina. Peña (1979) gives the measurements of two eggs of *M. rufiventris* apparently from Misiones without mentioning the nest. Castelino & Saibene (1989) report on a Grey-headed occupying a nest of the Sepia-capped Flycatcher *Leptopogon amaurocephalus* from the previous year and a pair carrying nest material to a round, hanging structure of moss with side entrance also in Misiones. These nests held clutches of three white eggs in September and early October.

In February 1990, during field work at Monte Alverne (29°33′S, 52°20′W), Santa Cruz do Sul, Rio Grande do Sul State, southern Brazil, I discovered two nests of the Grey-headed Flycatcher. The first